

skip alone March 3

Work Order ID 113551

\*113551\*

Page 1

February-21-14 1:24:05 PM

Item ID: D3391-023

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Mid Tube Assembly

Start Date: 2/21/14 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 3/07/14 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals: Process Plan: MLS Date: 14-02-21 Tooling:

Date:

Run Start \*NR1\*

QC: Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3391

I

100

0.00

\*100\*

Skidtubes

Skidtubes

0.00

Skidtubes

Memo

1-Cut tube to finish length as per Dwg D3391

2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

3-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"

4-Remove .030" from Fwd indexing Ridge as per Dwg D3391

5-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391

6-Deburr

7-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,

\*\*\*DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG

8-Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (10 holes) as per Dwg D3391

9-Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391

\*\*\*DO NOT OPEN 2 MOST FWD WEARPLATE HOLES\*\*\*

DC 14/02/26



**Work Order ID 113551**

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Page 2

Item ID: D3391-023

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Mid Tube Assembly

Start Date: 2/21/14 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 3/07/14 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

10-Open .375" holes to .438" \*\*\*do not open fwd saddle holes\*\*\*

11-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)

12- Transfer drill: one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allignment, open up previously tranfer drilled pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021  
D3391-021 BATCH: \_\_\_\_\_

13- Using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.

14- Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplate holes in D3391-021 using DT8937

15- Open 10 wearplate holes in D3391-021 to 0.297" dia.

16- insert D3391-021 into D3391-23

17- insert T-pins into first and third fwd saddle holes

18- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per

19- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499".

20-Deburr and blow out all chips from inside tube, scribe batch # in D3391-023 at aft end.

N/A 2/14-2-25



Work Order ID 113551

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Page 3


Item ID: D3391-023 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Mid Tube Assembly  
 Start Date: 2/21/14 Start Qty: 4.00 \*4\* Cust Item ID:  
 Required Date: 3/07/14 Req'd Qty: 4.00 \*4\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 *110* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		540 14/2/26		1			
120 *120* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				4/	0	14-2-26	JD
130 *130* QC Quality Control	QC7-Inspect Chemical Conversion Coat  Memo	0.00 0.00				DP		14-2-26	

February-21-14 1:24:05 PM

Page 4

4 0 14-02-27 



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Page 5

**Reference:**

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

Run	Start	*NR1*
	Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

**\*160\***

## Skidtubes

0.00

## Skidtubes

## Memo

0.00

## Skidtubes

1-Weld crossbolt spacer as per dwg D3391 & QSI 004

2-grind weld flush

acer as per dwg D3391 & QSI 004 A/R M120325 BE140227  
- DC 14/02/27

170

QC10- Inspect visual per QSI004- ground welds

0.00

**\*170\***

QC

## Memo

0.00

### Quality Control

① 14-02-27

~~DAS~~  
9  
9-89

180

QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

OC

## Memo

0.00

## Quality Control

① 14.02.27

**DAS**  
**9**  
**9.99**



SHIP ALONE MARCH 3.

Work Order ID 113551

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~~\*113551\*~~

Page 6

Item ID: D3391-023

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Mid Tube Assembly

Start Date: 2/21/14

Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 3/07/14

Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

185

Pressure Wash per QSI005 4.3

0.00

\*185\*

HandFinish

Memo

0.00

Hand Finishing

AND REALODINE AS PER PAR09-043

4 CF 14-2-28

190

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

\*190\*

Powdercoat

Memo

0.00

Powder Coating

START TIME: 7:50

OVEN TEMPERATURE: 320°

FINISH TIME: 8:20

4 φ 14-3-3. DAS 34 8-88

200

QC3- Inspect Part Finish

0.00

\*200\*

QC

Memo

0.00

Quality Control

4x 14/03/03



# Work Order ID 113551

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Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Mid Tube Assembly  
 Start Date: 2/21/14 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 3/07/14 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 <b>*230*</b> HandFinish Hand Finishing	HandFinishing  Memo 1- press fit D3591-1 spacers using DT9416 starting from 0.500" side 2-Install Inserts as per Dwg	0.00  0.00							
240 <b>*240*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00				4			
250 <b>*250*</b> Packaging Packaging	Identify as per dwg & Stock Location: _____  Memo	0.00  0.00							

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Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Mid Tube Assembly  
Start Date: 2/21/14 Start Qty: 4.00 **\*4\*** Cust Item ID:  
Required Date: 3/07/14 Req'd Qty: 4.00 **\*4\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC21- Final Inspection - Work Order Release	0.00							
<b>*260*</b>									
QC	Memo	0.00							
Quality Control									

MLJ 14-03-03

MLJ 14-03-03

# Picklist Print

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Page 1

Work Order ID: 113551

\*113551\*

Parent Item: D3391-023

\*D3391-023\*

Parent Item Name: Mid Tube Assembly

Start Date: 2/21/14

Required Date: 3/07/14

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP A05.10.20New Issue KJ/EC  
 IPP B06.02.10ECN773 dwg rev.D EC  
 IPP C 07.03.20 rev F dwg EC  
 IPP D 07.03.28 re-format EC  
 IPP E 07.10.31 ecn 1053P EC  
 IPP Rev:F ECN 1056 07-11-13 DD verified by: EC  
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC  
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC  
 IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP  
 Rev:J add in seq 140 expire date &b# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2500-1-100		Manufactured	No			100	Each	89.0000	1	4			
<b>*D2500-1-100*</b>													
Skidtube Extrusion													

Location	Loc Qty	Loc Code
HALL	89	
82373	28	
86065	61	

D3389-1		Manufactured	No			140	Each	3.0000	1	4			
<b>*D3389-1*</b>													
Web													

Location	Loc Qty	Loc Code
LG002	3	
108410	3	
113057	160	

D3681-1		Manufactured	No				Each	196.0000		20			
<b>*D3681-1*</b>													
Spacer													

Location	Loc Qty	Loc Code
LG001	196	
108647	60	
109109	136	

DC 14/02/25

DC 14/02/26

BE14-02-27

320

# Picklist Print

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Work Order ID: 113551

\*113551\*

Parent Item: D3391-023

\*D3391-023\*

Parent Item Name: Mid Tube Assembly

Start Date: 2/21/14

Required Date: 3/07/14

Start Qty: 4.00

Required Qty: 4.00

D3591-1

Manufactured No

Each

92.0000

8

\*D3591-1\*

\*\*

Bushing

Location

Loc Qty

Loc Code

FG

10

92873

10

FP001

82

100699

5

107918

40

109107

37

ALS4-1032-130

AELS4-1032-130 Purchased

No

230

Each

1,433.000

20

80

\*ALS4-1032-130\*

\*\*

Rivnut

Location

Loc Qty

Loc Code

ST279

1376

M128179

292

M128211

1084

st510

57

M126109

57

\*

QTY:

PART NO:

BATCH NO:

4x

D4095-045

B109669

(wearplate Assembly)  
center

M127832

36x 48x AN3C-4A (bolts)

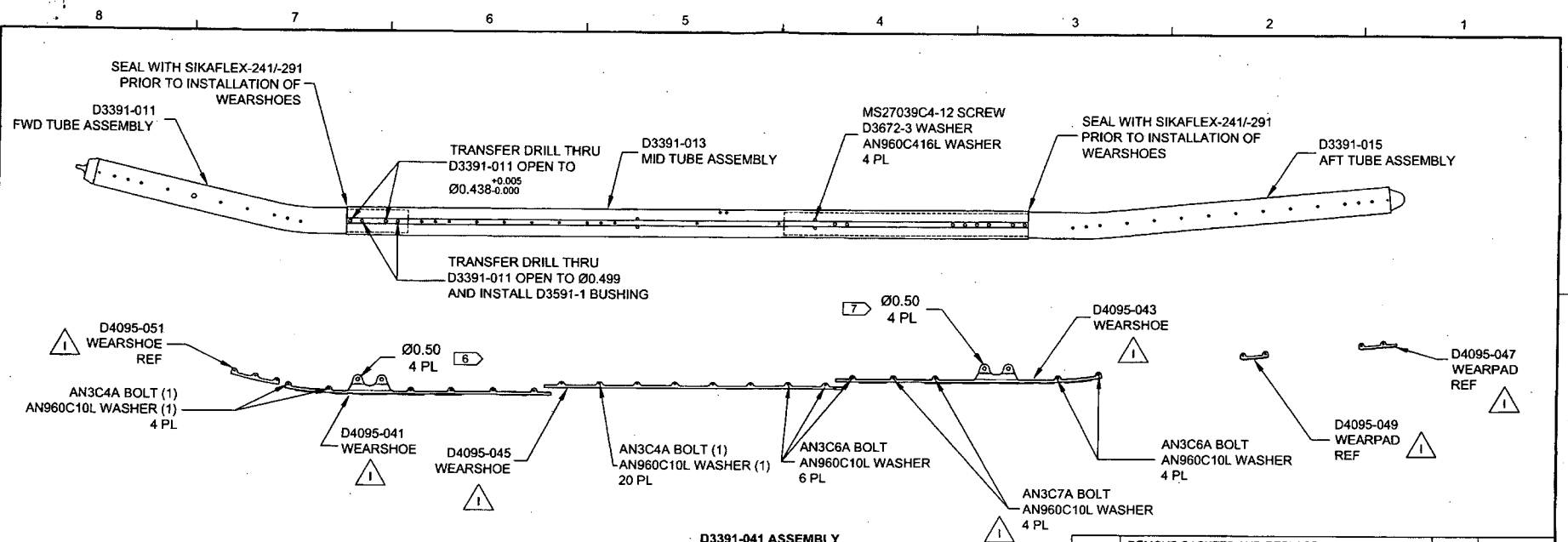
M127831

36x 48x NAS1149C0332 R (washers)

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Shop Packet Print

Page 2



**D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST**

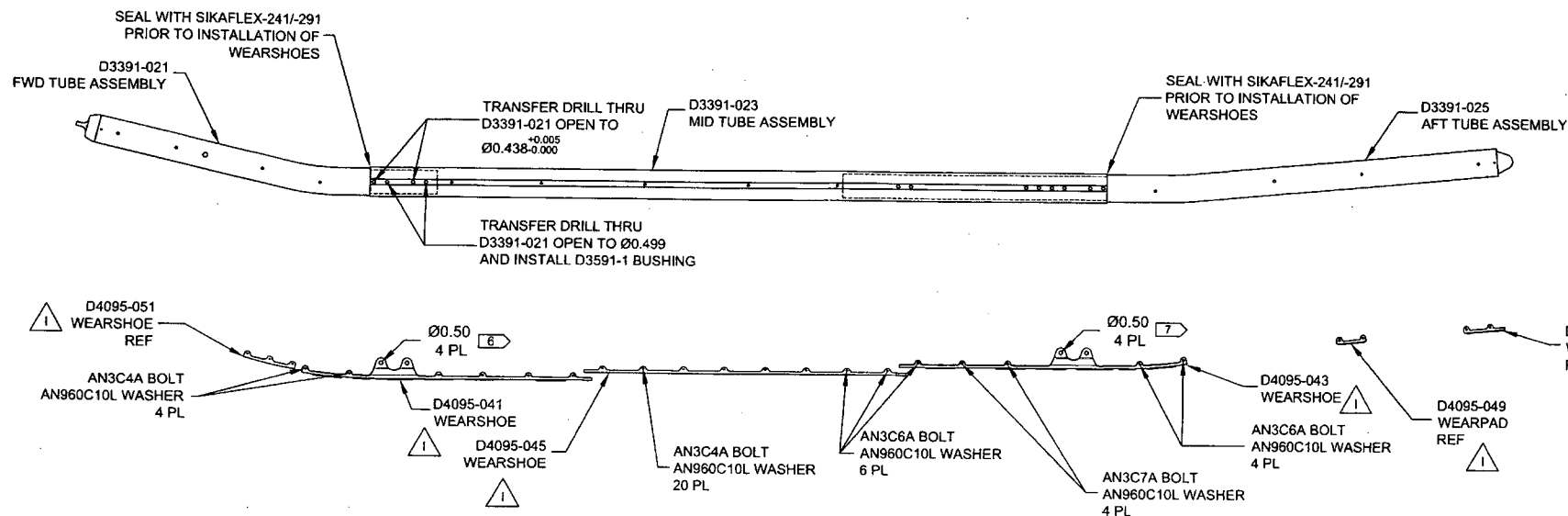
QTY -041	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
4	D3672-3	WASHER
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARSHOE
1	D4095-049	WEARSHOE
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

**GENERAL NOTES**

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
- 3) AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 7) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 8) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

**RELEASED**  
2011-11-04  
EOW#11-662

I	REMOVE GASKETS AND REPLACE ALL WEARSHOES; PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A6-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2, REMOVED INSERT AELS-1032-130, ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D6-4 ZN D2-4, ZN D7-8, ZN D3-8	XDF	11.10.13
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. 1
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



#### D3391-043 ASSEMBLY





#### D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY -043	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARSHOE
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER

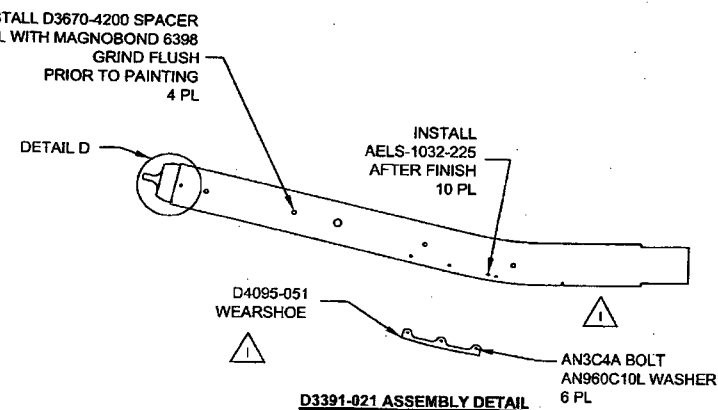
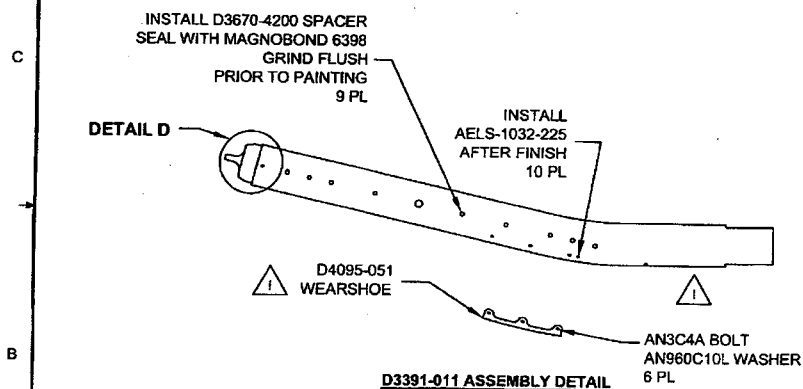
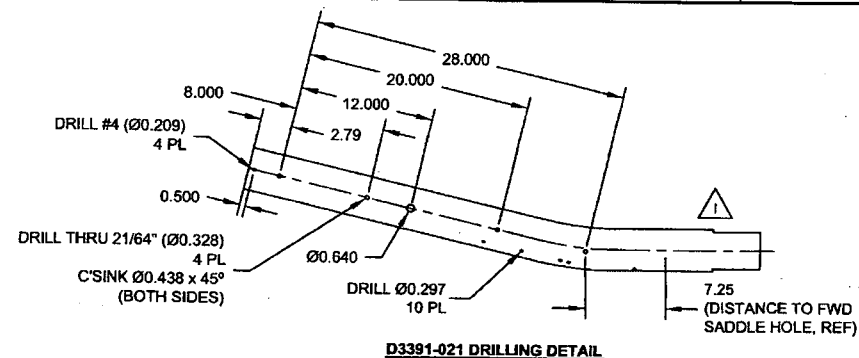
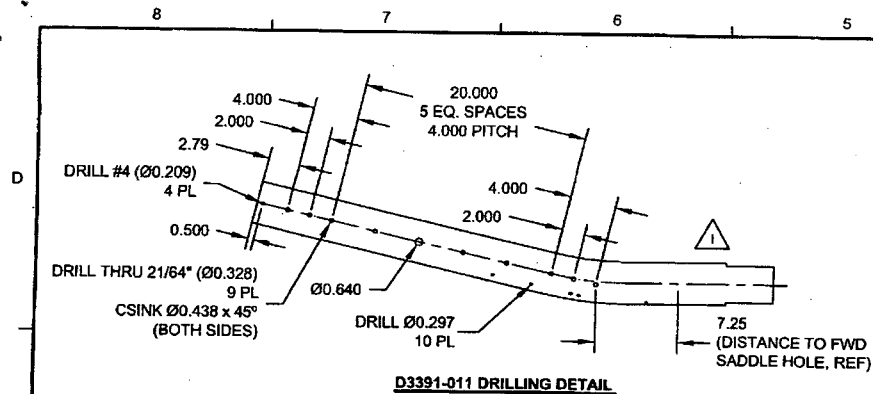
#### GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
- 3) AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL 0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 7) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL 0.50 HOLES FROM SADDLE TO D4095-041
- 8) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL 0.50 HOLES FROM SADDLE TO D4095-043

RELEASED  
2011-11-04

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV.
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC	
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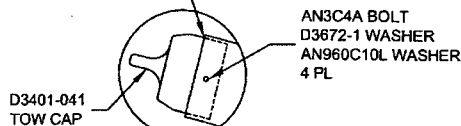




D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D3401-041	TOW CAP
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
1	1	D4095-051	WEARSHOE
1	1	D6013-047	FWD TUBE
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
10	10	AELS-1032-225	INSERT

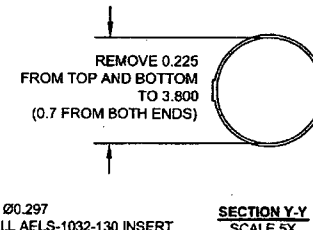
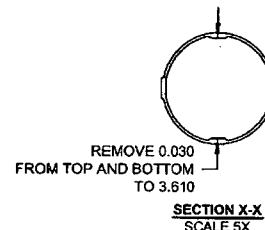
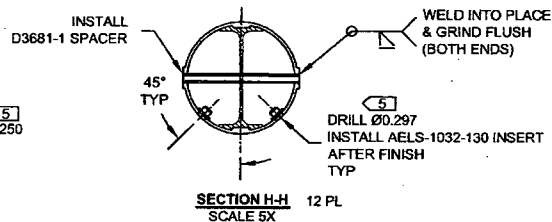
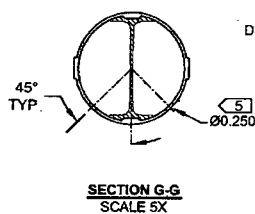
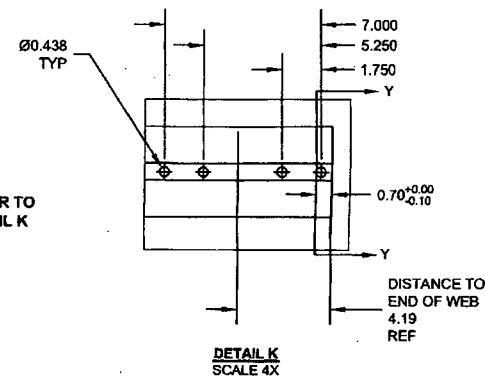
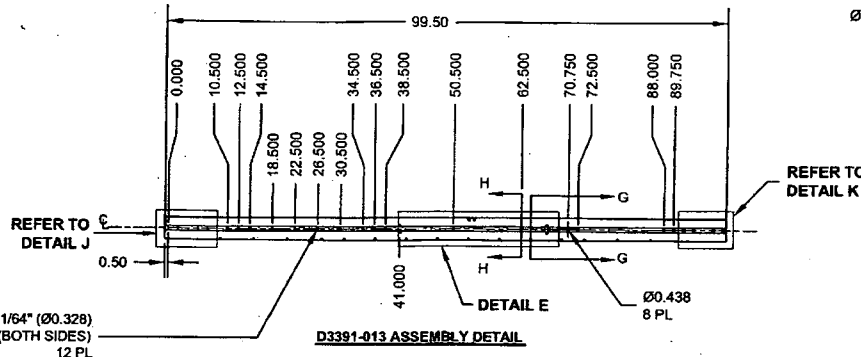
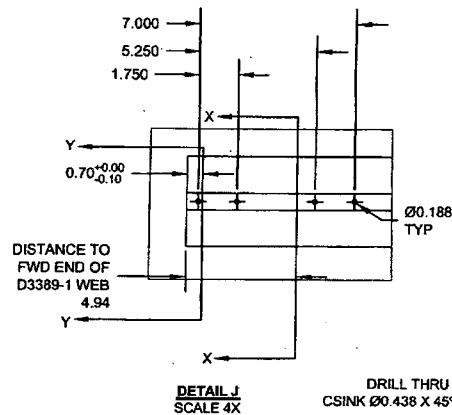
SEAL WITH  
SIKAFLEX-241/-291



DETAIL D  
SCALE 2X

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MFG. APPR.		D3391	SHEET 4 OF 8
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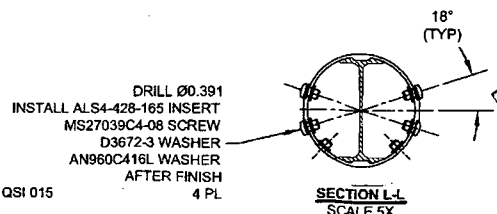
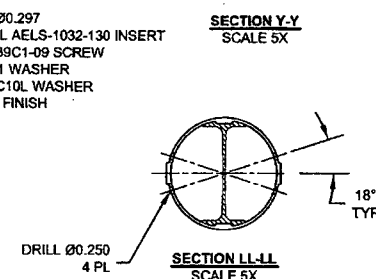
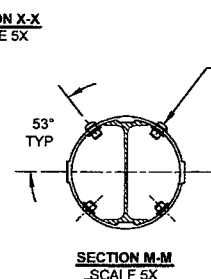
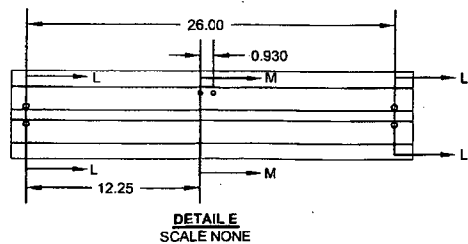


# **D3391-013 MID TUBE ASSEMBLY PARTS LIST**

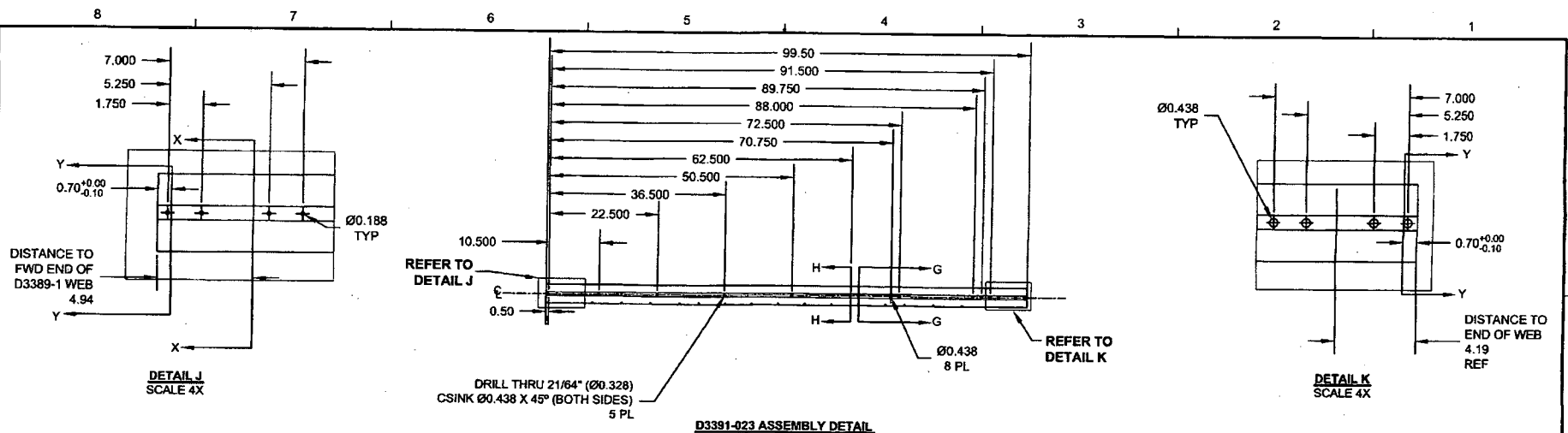
QTY -013	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

## **D3391-013 MID TUBE ASSEMBLY**

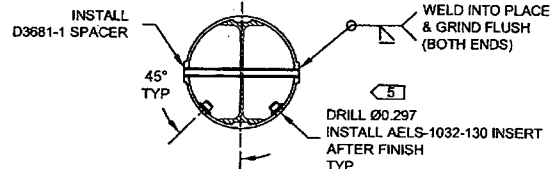
- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- WELDING: PER DART QSI 004



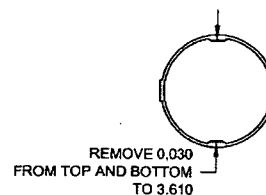
DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. 1
MFG. APPR.		D3391	SHEET 5 OF 8
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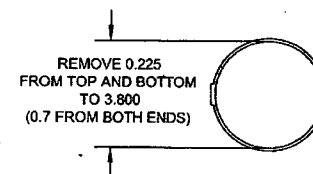
SECTION G-G  
SCALE 5X



SECTION H-H  
SCALE 5X



SECTION X-X  
SCALE 5X



SECTION Y-Y  
SCALE 5X

**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

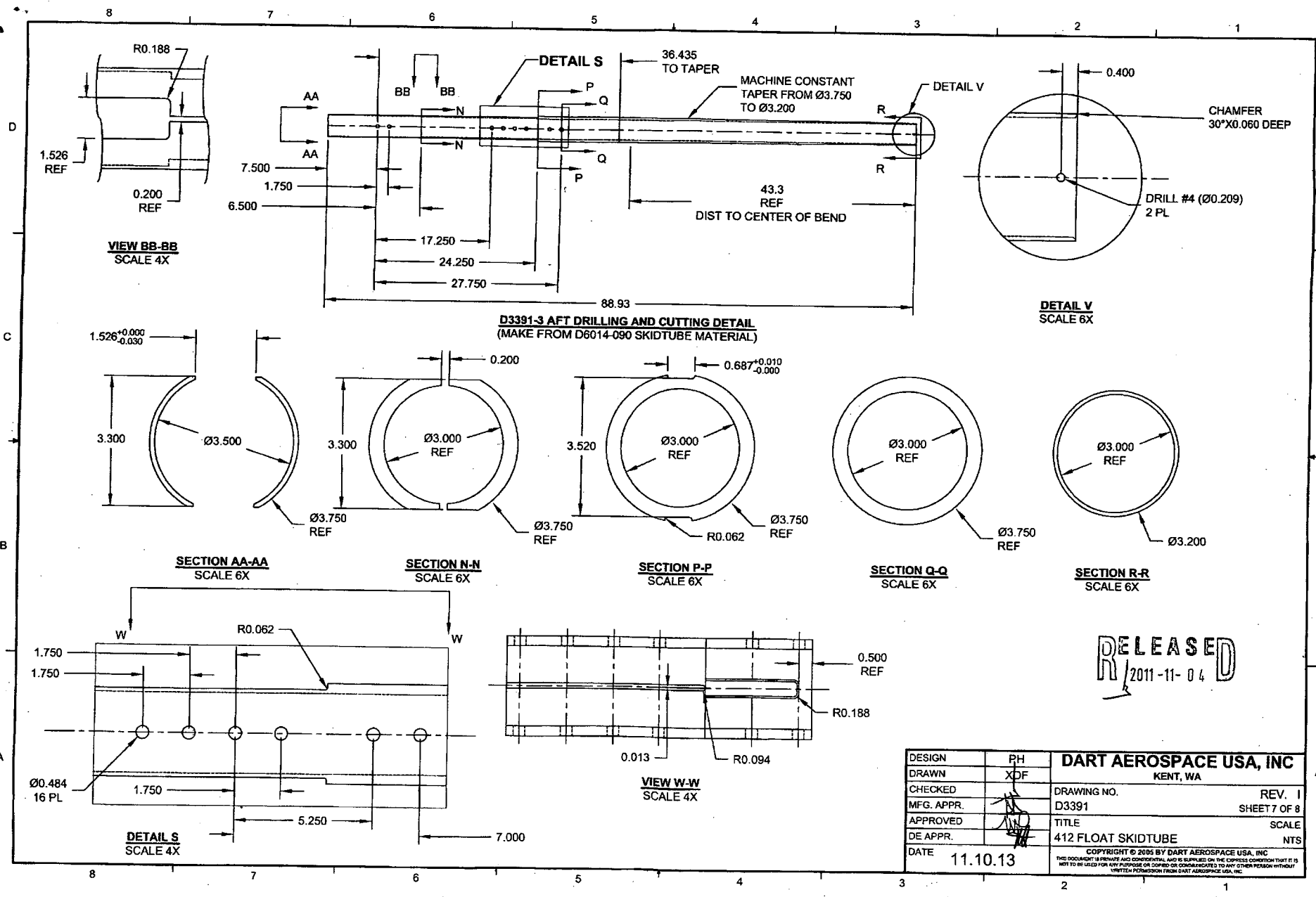
QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

**D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

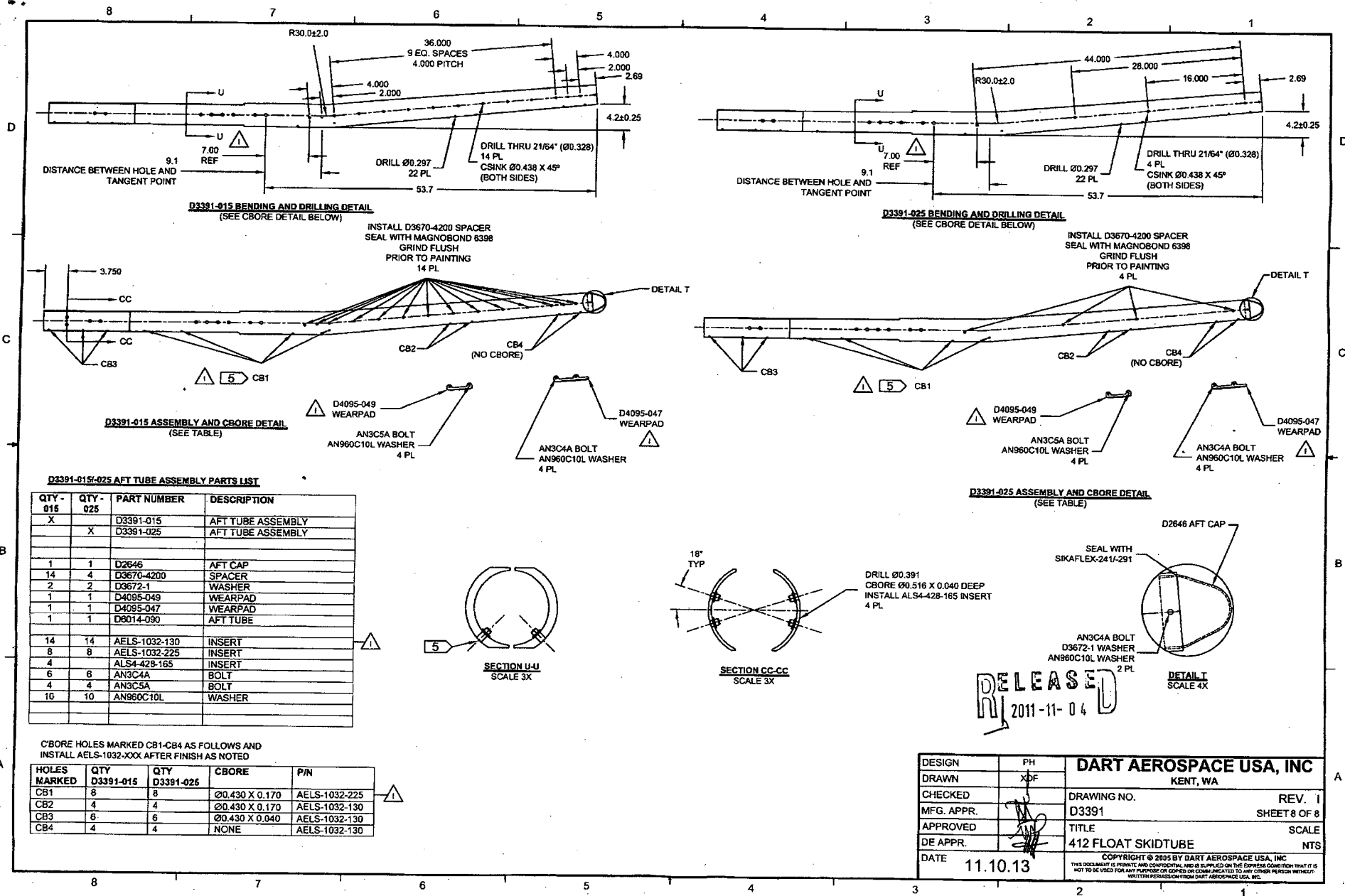
DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
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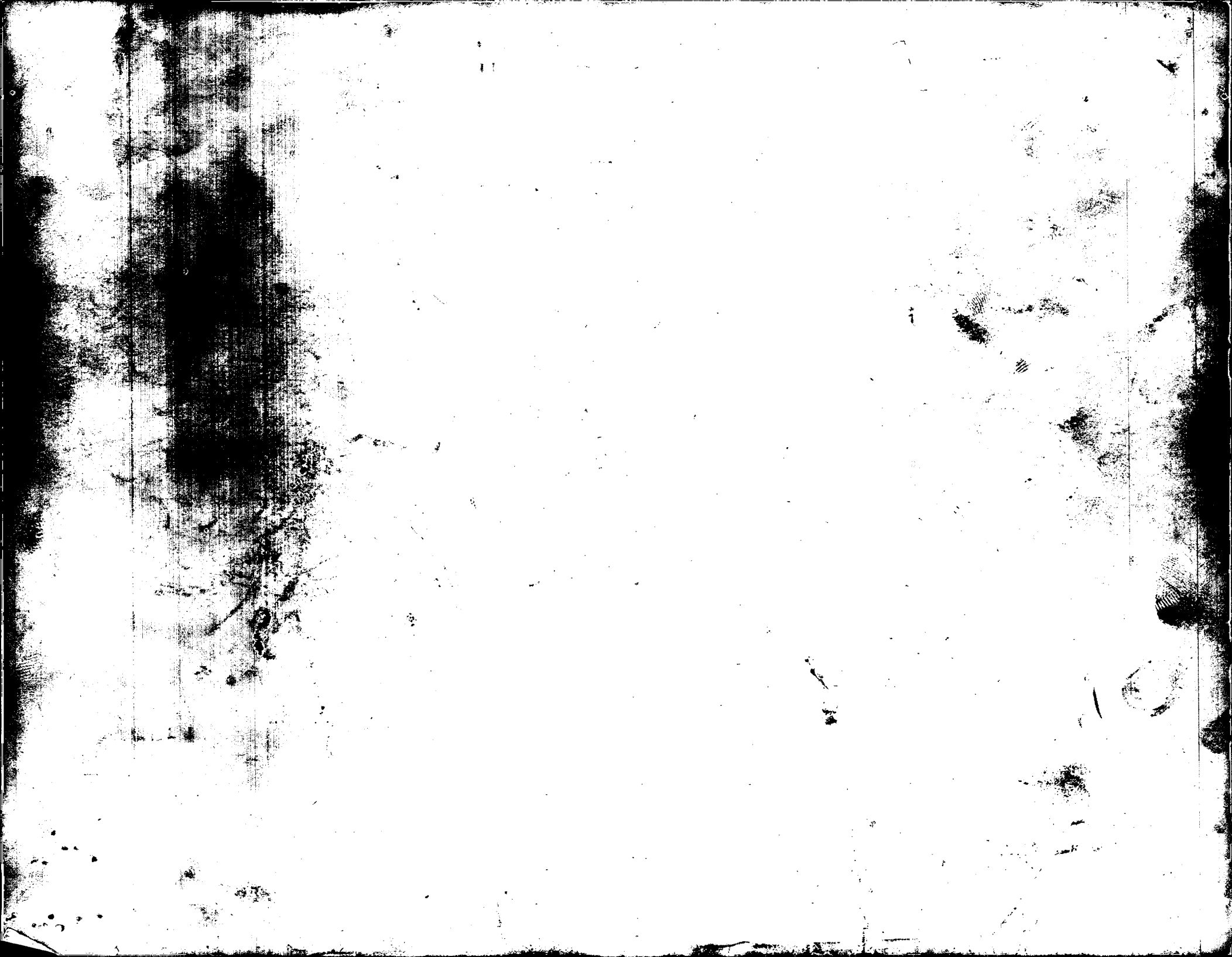
RELEASED  
2011-11-04



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2011-11-04

DESIGN	PH	DART AEROSPACE USA, INC	
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NO. 334

**AWS D17.1.2001  
QUALIFICATION TEST RECORD**

Name: Barclay Elliot  
Job #: 108035  
Part #: 3391-023  
Description: Skid Plate  
Welding Process: Tig[ ☒ ] Mig[ ☐ ]  
Base material: Alum  
Current: AC[ ☒ ] DC[ ☐ ]

**TEST REQUIREMENTS AND RESULTS**

Visual:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Incomplete Penetration:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Incomplete Fusion:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Cracks:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Overlap (cold lap)	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Undercut:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Pin holes:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Porosity (surface):	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Coloration:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]
Burn through:	pass[ <input checked="" type="checkbox"/> ]	fail[ <input type="checkbox"/> ]

Qualifier [Signature] Date of Test Coupon 13.10.25

Welder Barclay Elliot Date of Test Coupon 13-10-25

The above named individual is qualified in accordance with AWS D17.1.2001 to weld